



H10313RAR Customer No. 01333

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Thomas J. Foster

POST RIP IMAGE RENDERING IN AN ELECTROGRAPHIC PRINTER TO PREVENT CHARACTER SHIFT

Serial No. 10/785,676

Filed 24 February 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA. 22313-1450

Sir:

Group Art Unit: 2626

Examiner: Mark E. Wallerson

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450,

Dabra Nowacki

Date

## REMARKS

Claims 1-24 are rejected as being anticipated by Flickner et al.

In order to make a prima facie case of anticipation, the reference must teach all claim limitations. The reference cited by the Examiner fails to teach all the limitations of any of the independent claims.

It is respectfully submitted that Flickner et al. fails to teach or suggest identifying enclosed edge pixels located on the edge of enclosed areas of print characters having enclosed areas and reassigning the digital value of one or more enclosed edge pixels independently of other pixels.

The Examiner states that column 4, line 67 to column 6, line 26 provides this teaching. This section of Flickner et al. is hereby provided:

"Refer now to FIG. 4A for consideration of a pixel labeling window (PLW) adjacent the left edge of an image frame. Initially, it is to be understood that the frame defining an image to be viewed does not necessarily include all of the pixels in the image, and that undefined pixels lie adjacent the perimeter of the image frame, yet do not belong to the image. Thus, when P is adjacent the edge of the frame, the priority selection scheme will not work accurately. For example, when, as in FIG. 4A, P (defined by the intersection of column.sub.l and row.sub.j) is at the left perimeter of an image frame, the first two columns of the PLW will contain "undefined pixels" (indicated by "\*"), while the remaining three columns

will all have pixels defined with respect to the image frame being analyzed (indicated by "."). Therefore, the PLW in FIG. 4A falls on the left extreme boundary (LEB). If the PLW is relocated by one pixel to the right in FIG. 4A, then the neighbors U, V, and W will still be undefined; this location is referred to as the left near boundary (LNB). It should be noted that corresponding boundary conditions exist on the right-hand edge of the raster-scanned image; these are referred to as right extreme boundary (REB) and right near boundary (RNB).

In FIG. 4B, P lies at the intersection of the first row of the raster matrix, row.sub.l, and column.sub.h. Therefore, the top row of the PLW contains undefined pixels and is said to lie in the top boundary (TB). A corresponding bottom boundary (BB) of undefined pixels borders the bottom edge of the raster matrix.

In view of the described boundaries, and, assuming that the image frame matrix is larger than or equal to the component labeling window, 15 distinct boundary conditions must be accounted for when analyzing and labeling P. These conditions are given in Table I.

**TABLE I** 

Ç.

| BOUNDARY BOUNDARY CONDITION CONDITION DEFINING SIGNALS |        |
|--|--------|
| 1<br>##S   | TR1##  |
| 2<br>##S   | TR2##  |
| 3<br>##S <sup>-</sup>                                  | TR3##  |
| 4<br>##S   | TR4##  |
| 5<br>##S <sup>-</sup>                                  | TR5##  |
|  | TR6##  |
|  | TR7##  |
|  | TR8##  |
|  | TR9##  |
| 10<br>##S <sup>-</sup><br>11                           | TR10## |
|  | TR11## |
|  | FR12## |
|  | TR13## |
| - •  | TR14## |

## ##STR15##

For example, condition 1 defines the condition where P is adjacent the left extreme boundary and in neither the top left-hand nor the top right-hand corner of the raster matrix. Condition 5 corresponds to P being located in the bottom row (row.sub.n) and second column (col.sub.2) of the matrix. Condition 13 obtains whenever the PLW is located such that P is in row.sub.l of the raster matrix and the PLW is not adjacent either the left or right extreme or near boundaries. Under condition 15, no pixels in the PLW are undefined.

Returning again to the example of FIG. 4A, the practice of the invention requires that, for each of the boundary conditions 1-14, the inverse of the value of P be assigned arbitrarily to the undefined pixels in the PLW. This will remove the undefined pixels from inclusion in the above-described pixel labeling scheme, and remove any possibility of ambiguity in the labeling of pixels positioned adjacent the periphery of a raster-scanned image frame."

Applicant's find no mention of print characters, print characters having enclosed areas, or pixels located on the edge of enclosed print characters here or anywhere in Flickner.

Since Flickner et al. fails to teach all the limitations of any of the independent claims, it also fails to teach all of the limitations of any of the dependent claims. Applicant submits that Flickner et al. therefore fails to anticipate claims 1-24 and allowance of these claims is respectfully requested.

Respectfully submitted,

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.